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The Creation of an Analogue of the LEED™ Rating Systems for Set Design

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The Creation of an Analogue of the LEED™ Rating Systems for Set Design

by

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Dedication

I dedicate this work to Mom and Dad. Thank you. You always encourage me to do what makes me happy.

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I thank my advisor, Richard Isackes, for encouraging me to pursue this topic. I would also like to thank Susan Mickey and Jim Glavan for believing in the importance of this issue. Thank you to Matt Herman for your advice and to all my friends and family for your support.

Abstract

The Creation of an Analogue of the LEED™ Rating Systems for Set Design

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The purpose of this thesis is to create the foundation for a rating system that provides a consistent standard of measurement for sustainable set design, encompassing the entire process from concept, construction, and use, to deconstruction and waste management.

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Working on the crew of numerous film and theatre sets, I have had the exciting opportunity to see the manifestation of the vision of countless artists. The construction of these visions involves many different materials and methods, all of which have an impact not only visually and emotionally, but environmentally as well. I have also had the opportunity of working with a non-profit providing affordable housing, dedicated to sustainable building practices. These two experiences have led me to recognizing the similarities between the impacts of construction and deconstruction of both permanent architecture and the architecture of performance. The building industry has created a system of accountability, called the Leadership in Energy and Environmental Design™ (LEED) rating system. It has been a successful means of helping the industry reduce its environmental impact and has become an important marketing tool as well. My goal is to create an analogue to this system for set design. This system would be a tool for the entertainment industry to measurably improve its impact on the health of the larger community, and the health of the artisans involved in the creation of performance.

In order to create this rating system, my first step was to look for quantifiable data that supported my empirical data. I found that there have been a small number of studies conducted on the pollution contributed by the entertainment industry, and they confirmed my experiences. According to a study done at the UCLA Institute of the Environment, "The film and television industry and associated activities make a larger contribution to air pollution in the five-county Los Angeles region than almost all five other sectors researched."[1] This study included data collected from not just the filming portion of a

production, but the whole of it, from pre-production through filming and post-production. Much of the pollution is derived from the CO_2 emissions from vehicles used in the transportation of people and supplies, but special effects such as explosions and fire on sets are also contributors. During the filming of a production, extensive use of fossil fuel generators is common when on location. These generators typically generate more greenhouse gas emissions for the same amount of energy generated from an electric grid.[2]

In a report published by the Greater London Authority, the theatre industry is also a source of air pollution. "The total emissions from London theatres (excluding pre-production and audience travel) are approximately 50,000 tonnes a year."[3] This report included data from front of house operations as well as staging. Studies are being conducted now to determine the greenhouse gas emissions associated with the transport and travel of a typical touring Broadway production. This data will be important in determining the environmental impact of similar productions, and give the industry a starting point from which to base improvements.

There are many areas within a production in which to focus on green practices. When the Broadway Green Alliance was determining their first steps in researching how to incorporate sustainable practices in their theatres, they realized the enormous task ahead of them and divided the work among three subcommittees: pre- and post-production, production, and venues.[4]

The purpose of this thesis is to focus on the realization of the set design. The construction (pre-production), maintenance of greenery and use of pyrotechnics (production), and deconstruction (post-production) of sets for film and theatre can be

wasteful and harmful to the environment. Recently, efforts have been made to reduce this waste, and there have been a variety of artists and producers that have compiled green toolkits, or sets of guidelines, to use and share in their respective areas of expertise. Unfortunately, these resources are difficult to take advantage of when not all of the members of the production team support their recommendations. Too many decision makers in the industry, if they have knowledge of them, believe that following these guidelines is excessively time consuming and expensive. Understandably for a business, productions are chiefly interested in ticket sales or distribution- essentially the bottom line. In order to provide incentives for a production to adopt policies that will reduce its environmental impact, there needs to be a measurable standard of guidelines that when met, confer recognition for this achievement, which can then be used as a marketing tool.

The LEED certification process is an important standard created to provide a "concise framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions".[5] Through its implementation, the building community has seen benefits in both financial and environmental rewards. Some of the financial benefits can include water and energy savings achieved through building operation and maintenance. These savings can then translate into a more marketable property. Even the promise of a LEED certification in certain construction projects is now capable of increasing property value. Due to the temporary nature of a built set, these operational savings would not be applicable, but instead there would be unique financial benefits to building a set that has achieved certification from a rating system similar to LEED.

How can a LEED certified set contribute added value to a production? Businesses want the consumer dollar, and consumers want a good product. While consumers are making some decisions based on sustainability, we are not yet at a point where we can expect a consumer to choose one movie over another based on the green practices of each. Theatergoers choose based on the promise of a good story or experience. Well-known names of actors or directors attached to a production help to promote the fulfillment of that promise. The objective then is to draw in marketable talent to a production that will get consumers to buy. The marketing of the certification needs to happen with the talent, which will then bring in the consumer dollar. If a film or show can commit to earning something analogous to a LEED certification for its set design and construction, it will be more enticing to actors who are interested in environmental issues. In addition, it will be more enticing to investors who want to promote socially responsible projects.

Another financial benefit unique to built sets as opposed to permanent structures is that the deconstruction of a set is much more immediate. If a production plans well, it can arrange to donate or sell the waste instead of sending it to a landfill. In this way, the production can recoup some of their initial investment, and reduce their waste management costs. In the case of the movies "The Matrix 2 and 3", the production company was able to divert 97.5% of their deconstructed sets from the landfill by donating those materials to the non-profit The Re-Use People.[1] One of several set/prop reselling companies, Ready Set Recycle will post a listing on their website to sell used sets and set materials to other productions.

Several organizations such as the Green Theatre Initiative and the Greater Authority of London have created green building guidelines and lists of best practices, but there is no common standard, and missing from these is the measurability of goals, and/or third party certification. The Environmental Media Association (EMA) has a rating system for events and productions that is certified by Green Seal, but a production can do its own evaluation. It also uses language such as "Demonstration that a substantial portion of all purchases or acquisitions are socially and environmentally preferable" and "Reduced consumption / need for wood by renting metal scaffolding."[6] The assessment of what *substantial* and *reduced* means is arbitrary, and is not measurable without baseline data. Due to the fact that there have been so few studies done on the damage that is being done by the entertainment industry's construction practices, there are few baselines from which to measure improvement. Considering the large amount of concerned parties creating green toolkits to reduce their productions' environmental impact, we can assume it truly is an area of environmental concern that needs to be improved, but we need to establish baselines so that the industry can determine how to measure improvement quantitatively.

One of the benefits of the EMA's rating system over the current LEED rating systems is that it is not cost prohibitive. The flat registration fee of $1200 for a LEED project (if they had a rating system for set construction) would not be feasible for many smaller productions.[7] The EMA rating system is also less time intensive than the LEED certification process. This is a necessary consideration for a film or play whose whole production schedule may be less than six months. The needs of a production will vary

based on many factors, and a standardized rating system should be flexible enough to reflect these variables.

It is time for the entertainment industry to create a standard for green building practices that will be as recognizable and marketable as the LEED rating systems. We need an analogue to the LEED rating systems for buildings applied to set design and construction. Just as the LEED rating system does for architecture, a set design analogue will help productions reduce waste sent to landfills, conserve energy and water, be healthier and safer for artisans and performers, and reduce harmful greenhouse gas emissions. Creating a certification process to help set designers and artisans make better choices will help change the way in which sets are designed, built, and how they are disposed, recycled, or reused. Once its guidelines have been put into practice, the industry will see the cost benefits as well as the environmental benefits. My goal is to create the foundation for this rating system by continuing my research of the LEED rating systems, and to eventually collaborate with the creators of the LEED rating systems to implement it.

The following rating system, attached in the appendix, is an example of what a sustainability assessment tool for set design could look like, based on the existing LEED rating systems and the unique needs of film and theatre builds. I have compiled this rating system using portions from the LEED rating systems that are relevant, and adding portions that are specific to sets. These portions are my recommendations based on established guidelines from sources such as the Producer's Guild of America Green Unified Best Practices Guide, the EMA rating system, the Green Theater Choices Toolkit

published by the Mo`olelo Performing Arts Company, and the experiences of stagecraft persons. As I do not have a background in creating assessment tools, I have drawn heavily from the rubric and metrics of the LEED systems. My arbitration has been within the best of my abilities; I do understand that the point system will need a closer investigation. The allocation of points is based on my basic understanding of the weighting for each category, corresponding to its relative carbon impact. I used the impact categories and weights developed by the EPA's Tool for the Reduction and Assessment of Chemical and Other Environmental Impacts (TRACI), also used by LEED as part of their methodology to assess points to each credit in their rating systems.

As I am proposing this rating system as an addition to the family of LEED rating systems, I have structured it as closely to theirs as possible. All of the previously existing applicable credits retain the same intents and requirements created in LEED, and therefore are not attached unless changes have been made, in which case changes will be indicated by brackets, [ ]. The new credits proposed include their intent, requirements and potential strategies.

The Set Build Rating System, using the same format created in LEED, divides sustainability issues into seven different categories. For each category, there are credits listed that can be achieved. Each credit is similar to a task that must be carried out, and has a different amount of points allocated to it, depending on its importance within the TRACI categories of environmental impact. These points can be totaled to earn a certification for the production. The certification levels are:

Table 1

Certified	40- 49 points
Silver	50- 59 points
Gold	60- 79 points
Platinum	80- 110 points

The seven categories are: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, Innovation in Design, and Regional Priority.

The Sustainable Sites category addresses the environmental impact of choosing the site(s) of a performance. The site can be outside on undeveloped land, previously developed land, inside on a stage, etc. This category lists credits that a production can achieve in order to lessen impact on the site.

The Water Efficiency category seeks to reduce water use, and the credit offered is for using non-potable water for irrigation of greenery used on the set(s) of films or site specific performances.

The goal of the Energy and Atmosphere category is to reduce energy use, greenhouse gas emissions and the use of ozone depleting fire suppressants.

Materials and Resources is the largest category in this rating system, with 10 credits and a possible 45 points, including an Exemplary Performance point. It promotes the reduction of waste through recycling and reuse, and the selection of alternative construction materials that have less of an environmental impact.

Indoor Environmental Quality addresses indoor air quality and volatile organic

compounds (VOCs). These compounds can significantly affect the health of artisans working with materials containing them. The credits listed aim to improve the air quality and the workers' health by limiting the amount of materials with high VOC content that can be used on a production.

Innovation in Design credits reward exemplary performance in an already existing credit in another category, or an innovative intent to address an issue not previously addressed with a credit in this rating system. It also offers a credit point for the production that includes a LEED Accredited Professional, to educate the team about the importance of the credits and simplify the certification process. The Teaching Tool credit allows a production to earn a point for including in their performance a visual reference to an activity that promotes sustainability.

The final category, Regional Priority, tackles the environmental issues that are important in a particular region.

The goal of the Set Build Rating System is to allow a production to use the tool to make better choices. The decision to use the tool needs to happen in the very beginning of the production, before a design concept has been developed. Goals need to be established, and then the team can look at the credits and decide which ones to try to achieve, while not compromising their design options or their budgets. The Set Build Rating System may not always be the right step for every production, but the more it is used, the more we as an industry will be informed of the choices we have to improve the impact we have on the world.

APPENDIX

Notice: This rating system has been provided as part of a final report for graduate studies. The recommendations in the document do not constitute LEED endorsement or involvement. Mention of other trade names or commercial products also do not constitute endorsement. The information is provided solely as an example that might be useful to designers and the industry to lessen their environmental impact.

Table 2

Set Build Project Checklist

Y	N	?	P/C	CATEGORY	POSSIBLE POINTS:	#	NOTES:
				SUSTAINABLE SITES (SS)			
			P 1	Construction Activity Pollution Prevention			
			C.1	Site Selection		2	
			C.2	Alternative Transportation, Public Transportation Access		7	
			C.3.1	Restore Habitat, Greenfield Site		2	
			C.3.2	Restore Habitat, Previously Developed Site		2	
				WATER EFFICIENCY (WE)			
			C.1	Water Efficient Landscaping		3	
				ENERGY AND ATMOSPHERE (EA)			
			C.1	Local Hire		7	
			C.2	Lighting		6	
			C.3	Generators/Grid		6	
			C.4	Alternative Transportation, Low-emitting and Fuel-efficient Vehicles		6	
			C.5	Refrigerant Management		3	
				MATERIALS AND RESOURCES (MR)			
			C.1	Set Reuse/Location		4	
			C.2	Prop Reuse		4	
			C.3	Construction Waste Management		6	
			C.4	Materials Reuse		7	
			C.5	Recycled Content		5	
			C.6	Regional Materials		6	
			C.7	Rapidly Renewable Materials		2	
			C.8	Design for Disassembly		2	
			C.9	Certified Wood		4	
			C.10	Chemical Disposal		4	
				INDOOR ENVIRONMENTAL QUALITY (IEQ)			
			C.1	Low-Emitting Materials, Adhesives and Sealants		3	
			C.2	Low-Emitting Materials, Paints and Coatings		3	
			C.3	Low-Emitting Materials, Constructed Flooring		3	
			C.4	Low-Emitting Materials, Composite Wood		3	
				INNOVATION IN DESIGN (ID)			
			C.1	Innovation in Design		1-4	
			C.2	LEED AP		1	
			C.3	Teaching Tool		1	
				REGIONAL PRIORITY (RP)			
			C.1	Regional Priority		1-4	
				TOTAL POSSIBLE POINTS		110	

SS Prerequisite 1: Construction Activity Pollution Prevention

Corresponds to LEED 2009 for New Construction and Major Renovations Rating System, SS Prerequisite 1: Construction Activity Pollution Prevention.

Change to Requirements:

If there is no construction for a set outside of a studio or theater, the prerequisite has been met.

SS Credit 1: Site Selection

Corresponds to LEED 2009 for New Construction and Major Renovations Rating System, SS Credit 1: Site Selection.

Change to Intent:
To avoid the development of inappropriate sites…from the location of [construction] on a site.

Change to Potential Strategies:
[*Add text*: If there is no construction, including of roads and clearings, on an outdoor site, this credit intent has been met.]

SS Credit 2: Alternative Transportation, Public Transportation Access

Corresponds to LEED 2009 for New Construction and Major Renovations Rating System, SS Credit 4.1.

*For the purpose of this credit, a site is defined as the place a set is being built, installed, dressed, filmed, or deconstructed, and includes any built location for filming, an existing location, a studio, or a theater. A base camp can be used instead of a location, given that the base camp provides carpooling for all staff to the filming location.

Change in Requirements:
Under Option 1:
[25% of selected] sites are within ½ mile…
Exemplary Performance:
[50% of selected sites are within ½ mile walking distance to a rail station.]
Under Option 2:
[25% of selected] sites are within ¼ mile… [Remove text: usable by building occupants.]
[50% of selected sites are within ¼ mile walking distance to two or more bus lines.]

Change in Strategies:
[Replace text with: Locate project sites near mass transit.]

Change in Documentation:
Identify local rail…serving the project [location].
Develop a site vicinity plan…between the [project location's] main entrance…

SS Credit 3.1: Restore Habitat, Greenfield Site

Corresponds to SS Credit 5.1, LEED 2009 for New Construction and Major Renovations Rating System.

Change Requirement:

[OPTION 1:
Do not disturb Greenfield sites.
Or
OPTION 2:
Restore 95% of the total Greenfield site area to the original condition, using native or adapted vegetation.]

Change Implementation:

[Survey greenfield sites …Carefully
site the [project site] to minimize … and design the [project site] to minimize its footprint.
Strategies include [text removed] sharing parking facilities with neighbors.
Establish clearly-marked construction … of the existing site [text removed].

Change Documentation:

[Document predevelopment condition using photos and collecting samples of vegetation. Document area of disturbance. Document restored area.]

SS Credit 3.2: Restore Habitat, Previously Developed Areas

Corresponds to SS Credit 5.1, LEED 2009 for New Construction and Major Renovations Rating System.

Change Requirement:
[Restore 20% of the total site area with native or adapted vegetation.]

Change Documentation:
[*text removed*: Case 1]

WE Credit 1: Water Efficient Greenery

Corresponds to, LEED 2009 for New Construction and Major Renovations Rating System, WE Credit 1: Water Efficient Landscaping.

Change Intent:
[*Replace* landscape with greenery]

Change Requirements:
[*Remove text*: (2 points)…(4 points)…Path 2…]
[Exemplary Performance, Option 2]

EA Credit 1: Local Hire

Intent:
To reduce pollution and the environmental impacts associated with the use of fossil fuels for travel.

Requirements:
For 50% of the total time spent working on a project, 80% of the artisans and designers contracted to work in the art department, scene, paint, and prop shops, set decoration, and for installation of the set will be hired from within 60 miles of that project.

Potential Technologies and Strategies:
Document the travel expenditures of employees mentioned above.

EA Credit 2: Lighting the set/stage

Intent:
Reduce the environmental and economic impacts associated with excessive energy use.

Requirements:
Use LED or CFL lights for 20% of lighting needs during a performance or filming. This includes use of practicals.

Potential Technologies and Strategies:
Document light plot and instruments used in practicals, or instruments used while filming, including set dressing.

EA Credit 3: Generators/Grid

Intent:
To reduce the environmental impacts associated with fossil fuel energy use.

Requirements:
Part 1:
Use grid energy from studio or theater enrolled in a green energy program.
Part 2:
If using generators, use biodiesel instead of diesel.

Potential Technologies and Strategies:
Document certification of green power. Document rental and/or purchase of generator and biodiesel.

EA Credit 4: Alternative Transportation, Low-emitting and Fuel-efficient Vehicles

Corresponds to, LEED 2009 for New Construction and Major Renovations Rating System, SS Credit 4.3, Alternative Transportation, Low-emitting and Fuel-efficient Vehicles.

Change Requirements:

[*Replace text with*: 10 % of vehicles provided or used for set delivery, truck rental, buyers, and shop use are low-emitting and fuel-efficient vehicles.]

Change Potential Technologies and Strategies:

[*Replace text with*: Reserve transportation early. Compile list of alternative-fuel refueling station locations for staff.]

EA Credit 5: Refrigerant Management

Corresponds to, LEED 2009 for New Construction and Major Renovations Rating System, EA Credit 4: Enhanced Refrigerant Management.

Change to Requirements:
[*Remove all text except*: Do not operate or install fire suppression systems that contain ozone-depleting substances such as CFCs, hydrochlorofluorocarbons (HCFCs) or halons.]

Change to Potential Technologies & Strategies:
[*Remove all text except*: Use fire suppression systems that do not contain HCFCs or halons.]

MR Credit 1: Set Reuse or Location

Corresponds to, LEED 2009 for New Construction and Major Renovations Rating System, MR Credit 1.1: Building Reuse—Maintain Existing Walls, Floors and Roof.

Change to Intent:
To extend the lifecycle of existing [built sets] and/or conserve resources, reduce waste, and reduce environmental impacts of [new construction] as they relate to materials manufacturing.

Change to Requirements:
25% of the total square footage used as a set existed previously as a set or structure.

Change to Potential Strategies:
Consider reusing existing building structures [(locations in film), sets constructed for previous productions and modified, or design the set to include the building structure of the theater, such as the back/side walls in black box theaters. If less than 75% of the square footage used as a set is newly constructed, this credit requirement has been met.]

MR Credit 2: Prop Reuse

Corresponds to, LEED 2009 for New Construction and Major Renovations Rating System, MR Credit 1.2: Building Reuse—Maintain Interior Nonstructural Elements.

Change to Intent:
To extend the lifecycle of existing [prop] stock, conserve resources, reduce waste and reduce environmental impacts of new construction of [props, including set dressing] as they relate to materials manufacturing and transport.

Change to Requirements:
[50% of the properties used on set, including set, trim and hand props were previously constructed or fabricated.]

Change to Potential Strategies:
[Rent, borrow or buy used furniture, draperies, and objects. Document prop and set decoration break down lists/purchases and rentals budgets, showing the origins of each prop. Less than 50% of the props obtained for this production are fabricated from new materials or purchased new. Use a simple count of total number of props.]

MR Credit 3: Construction Waste Management

Corresponds to, LEED 2009 for New Construction and Major Renovations Rating System, MR Credit 2: Construction Waste Management.

Change to Requirements:

… The minimum percentage debris to be recycled or salvaged is [50%.]

MR Credit 4: Materials Reuse

Corresponds to, LEED 2009 for New Construction and Major Renovations Rating System, MR Credit 3: Materials Reuse.

Change to Requirements:
Use salvaged… the sum of which constitutes at least 5%, based on cost, of the total value of materials on the project. [*Text removed*]

Change to Potential Technologies & Strategies:
Identify … into the set design, and research potential material suppliers. Consider … furniture, brick, and decorative items. Materials used toward the Set Reuse credit cannot be used toward this credit, although will be included as part of the total value of materials.

MR Credit 5: Recycled Content

Corresponds to, LEED 2009 for New Construction and Major Renovations Rating System, MR Credit 4: Recycled Content.

Change to Requirements:
Use materials … content constitutes at least 10%, based on cost, of the total value of the materials in the project. [*Text removed.*] The recycled content value … to determine the recycled content value. [*Text removed.*]

MR Credit 6: Regional Materials

Corresponds to, LEED 2009 for New Construction and Major Renovations Rating System, MR Credit 5: Regional Materials.

Change to Requirements:
Use building materials … for a minimum of 10% based on cost, of the total materials value. If only a fraction … contribute to the regional value. [*Text removed*.]

MR Credit 7: Rapidly Renewable Materials

Corresponds to, LEED 2009 for New Construction and Major Renovations Rating System, MR Credit 6: Rapidly Renewable Materials.

Change to Requirements:
Use… products for 2.5% of the total value of all [new] building materials and products used in the project, based on cost…

Exemplary Performance:
5%

MR Credit 8: Design for Disassembly

Corresponds to, LEED 2009 for New Construction and Major Renovations Rating System, Intent for MR Credit 3: Materials Reuse.

Intent:
To make the reuse of set building materials easier in order to reduce demand for virgin materials and reduce waste, thereby lessening impacts associated with the extraction and processing of virgin resources.

Requirements:
Design the set so that it can be disassembled without affecting the structural integrity of the parts, allowing it to be reused by another production, or donated to a charitable organization to be reused.

Potential Technologies & Strategies:
Minimize the use of adhesives. Minimize different kinds of fasteners to minimize need for different fastener removal tools, and to reduce disassembly time. Fasteners should be easy to access and remove. Provide design and construction documents.

MR Credit 9: Certified Wood

Corresponds to, LEED 2009 for New Construction and Major Renovations Rating System, MR Credit 7: Certified Wood.

Change to Requirements:
Use a minimum of [25%] (based on cost) of wood-based materials … general dimensional framing, flooring, sub-flooring, wood doors and finishes. [*Text removed*.]

MR Credit 10: Chemical Disposal

Intent:
To reduce pollution and the environmental impacts of chemical waste.

Requirements:
Donate unused paints and sealants to a charitable organization that collects these chemicals to be reused.
Dispose of hazardous wastes at the appropriate hazardous waste center in the community.

Potential Strategies:
Make a plan to estimate the correct amount of paints, sealants, and other chemicals in order to reduce the amount of overage/waste. Have the charity document how much overage was donated. Get a receipt for the hazardous waste disposal.

IEQ Credit 1.1: Low-Emitting Materials, Adhesives and Sealants

Corresponds to LEED 2009 for New Construction and Major Renovations Rating System, IEQ Credit 4.1: Low-Emitting Materials—Adhesives and Sealants.

Change to Requirements:
[*Replace text with*: For the use of adhesives and sealants on an interior set, use the Green Theater Choices Toolkit published by the Mo`olelo Performing Arts Company to comply with the following breakdown of usage:
No more than 5% of adhesives and sealants used will be from category 0, with no more than 20% from categories 0 and 1 combined. Maintain established regulations of safe handling, i.e. ventilation and/or use of respirators.]

[Exemplary Performance:
100% from categories 2 and above.]

Change to Potential Technologies & Strategies:
[*Replace text with*: Specify low-VOC materials in construction documents. Refer to the Green Theater Choices Toolkit for alternative choices to higher VOC materials. Document materials usage by weight.]

IEQ Credit 1.2: Low-Emitting Materials, Paints and Coatings

Corresponds to LEED 2009 for New Construction and Major Renovations Rating System, IEQ Credit 4.2: Low-Emitting Materials—Paints and Coatings.

No changes.

IEQ Credit 1.3: Low-Emitting Materials, Constructed Flooring

Corresponds to LEED 2009 for New Construction and Major Renovations Rating System, IEQ Credit 4.3: Low-Emitting Materials—Flooring Systems.

Change to Requirements:
All carpet installed in [a] building interior…

IEQ Credit 1.4: Low-Emitting Materials, Composite Wood and Agrifiber Products.

Corresponds to LEED 2009 for New Construction and Major Renovations Rating System, IEQ Credit 4.4: Low-Emitting Materials—Composite Wood and Agrifiber Products.

No changes.

ID Credit 1: Innovation in Design

Corresponds to LEED 2009 for New Construction and Major Renovations Rating System, ID Credit 1: Innovation in Design.

Change to Requirements:
[1-4 points]
…Achieve significant, measurable environmental performance using a strategy not addressed in the [Set Build Rating System]…
…No more than [4] points under IDc1 may be earned…[*text removed: through PATH 1—Innovation in Design*]
…Achieve exemplary performance in an existing [Set Build Rating System] prerequisite or credit that allows exemplary performance as specified… [*text removed*: *in the LEED… 2009 Edition.*]
[*Path 3 removed*]

Change to Potential Technologies & Strategies:
Substantially exceed a [Set Build Rating System] performance credit such as energy performance or water efficiency.

ID Credit 2: LEED AP

Corresponds to LEED 2009 for New Construction and Major Renovations Rating System, ID Credit 2: LEED Accredited Professional.

No changes.

ID Credit 3: Teaching Tool

Intent:
Promote issues of sustainability.

Requirements:
Within the performance, use positive or casual depiction of an activity that promotes sustainability.

Potential Strategy:
When designing the world of the characters, consider which ones might include strategies in their everyday activities that help to reduce their carbon footprint. Possibilities could be to choose a fuel-efficient car for a central character, or showing recycling bins as set dressing. Promote sustainable choices as normal occurrences.

RP Credit: Regional Priority

Corresponds to RP Credit 1, LEED 2009 for New Construction and Major Renovations Rating System.

No changes.

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Resources:

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The Environmental Media Association, www.ema-online.org

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